APPENDIX E

MONITORING WELL BORING LOGS

E-1

URSGWC MONITORING WELL BORING LOGS

BORING LOG

HOLE No. **WC1-1S**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 2 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoons; 4 1/4" ID, 5' augers	8. HOLE LOCATION: Northwestern section of site, in western section ofArea No. 1.	
	9. SURFACE ELEVATION: + 8.04 feet	
	10. DATE STARTED: 3/22/99	11. DATE COMPLETED: 3/22/99
12. OVERBURDEN THICKNESS: > 12 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5 feet below ground surface	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS AFTER WELL DEVELOPMENT: 5.6 ft bgs	
14. TOTAL DEPTH OF HOLE: 12 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5		Asphalt (4")					
	S-1	Loose, moist, brown, clayey f. SAND Clayey SAND (SC) FILL LAYER	PID = 0 ppm 9:35			5 3 3 3	12" Recovery
2							
2.5	S-2	Same as S-1 FILL LAYER	PID = 0 ppm 9:40			5 4 4 4	15" Recovery
4							
4.5	S-3	Med. dense, wet, brown, c-f SAND, some gravel (SP) GLACIAL DEPOSITS	PID = 0 ppm 9:45			6 10 11 12	13" Recovery
W.T.							
6							
6.5	S-4	Med. dense, wet, brown, c-f SAND, trace gravel (SP)	PID = 0 ppm 9:50			5 11 10 8	21" Recovery
8							
8.5	S-5	Med. dense, wet, brown-lt. gray, c-f SAND, trace gravel - Poorly Sorted SAND (SP) GLACIAL DEPOSITS	PID = 0 ppm 10:00			6 9 11	20" Recovery
10							

HTW DRILLING LOG

HOLE No. **WC1-1S**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 2 OF 2 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					13	
12		END OF BORING					
14							
16							
18							
20							
22							
24							
26							

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URSGWC Federal Services
Log prepared 7/25/02

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC1-1S

BORING LOG

HOLE No. **WC2-1D**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 10 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoons; 4 1/4 " ID, 5-foot augers	8. HOLE LOCATION: About 5 ft from Northwest corner of B-58 (Area #2)	
	9. SURFACE ELEVATION: + 6.69 feet	
	10. DATE STARTED: 4/2/99	11. DATE COMPLETED: 4/14/99
12. OVERBURDEN THICKNESS: 150.5 ft	15. DEPTH GROUNDWATER ENCOUNTERED: 5 ft below ground surface	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 4.9 ft bgs	
14. TOTAL DEPTH OF HOLE: 150.5 ft	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
Samples taken from S-3, S-6, S-14, S-17, S-27, and S-31 for TOC and CEC Analysis.				TOC, CEC	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	ASPHALT					
		Loose to med. dense, moist, brown, f SAND, trace gravel, silt - Poorly graded SAND (SP)	PID = 0 ppm 4/2/99 13:20			6	16" Recovery
		FILL LAYER				8	
2						12	
						16	
2.5	S-2	Loose, moist, brown, fine SAND, some gravel, trace silt - Poorly Graded SAND (SP)	PID = 0 ppm 13:30			7	6" Recovery
						8	
4						5	
						4	
4.5	S-3	Loose, moist, gray, m-f SAND, some gravel and silt - Poorly Sorted SAND (SP)	Headspace = 29.6 ppm 13:40		WC2-1D/ S-3 For TOC and CEC Analysis	7	10" Recovery
W.T.						6	**Sample is oil stained and exhibits a diesel-like odor.**
6						4	
						4	
6.5	S-4	Loose to med. dense, wet, dk. gray, c-f SAND, some gravel - Poorly Sorted SAND (SP)	Headspace = 5.6 ppm 13:45			7	12" Recovery
						16	**Sample is oil-stained and exhibits a diesel-like odor.**
8						14	
						10	
8.5	S-5	FILL LAYER	Headspace = 1.1 ppm 13:50			2	10" Recovery
						6	**Sample exhibits a slight petroleum odor.**
10						3	

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 2 OF 10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					6	
12							
14							
15	S-6	Very soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. SAND - ORGANIC SILT (OL)	PID = 0 ppm 14:05		WC2-1D/ S-6 For TOC and CEC Analysis	WOR	24" Recovery
16		ESTUARINE SILT					
17						2	
18							
20	S-7	Very soft, moist, dk. gray, low plasticity, ORGANIC SILT, some f. SAND - ORGANIC SILT (OL)	PID = 0 ppm 14:15			WOR	24" Recovery
22						2	
24							
25	S-8	Very soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. SAND, H2S odor - ORGANIC SILT (OL)	PID = 0 ppm 14:25			WOR	24" Recovery
26							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-1D

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 3 OF 10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					WOR 3	
28							
30	S-9	Very soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. SAND, H2S odor - ORGANIC SILT (OL)	PID = 0 ppm 14:40			WOR 2	24" Recovery
32							
34							
35	S-10	Very soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. SAND, H2S odor - ORGANIC SILT (OL)	PID = 0 ppm 14:55			WOR 2 3	24" Recovery
36							
37							
38							
40	S-11	Very soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. SAND, plant roots - ORGANIC SILT (OL) ESTUARINE SILT	PID = 0 ppm 4/3/99 10:50			WOR 2 2 2	24" Recovery
42							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-1D

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	4	10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-12	Very loose, moist, greenish-gray, c-m SAND, some f sand, trace micaceous sand, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 11:05			WOR	24" Recovery
46		GLACIAL DEPOSITS				2	
47						4	
48							
50	S-13	Loose, moist, greenish gray, c-f SAND, some gravel, trace silt, trace micaceous sand - Well Graded Sands (SW)	PID = 0 ppm 11:15			3	24" Recovery
52						4	
54						9	
55						9	
56	S-14	Med. dense, moist, greenish gray, m-f SAND, some c. sand, trace gravel, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 11:30		WC2-1D/ S-14 For TOC and CEC Analysis	8	Recovery Information is not available
57						14	
58						22	
						29	

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 5 OF 10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
60							
	S-15	Med. dense, moist, green to brown, m-f SAND, trace c. sand, silt - Poorly graded SAND (SP)	PID = 0 ppm 11:45			9 11 22 26	20" Recovery
62							
64							
	S-16	Med. dense, moist, green to brown, c-m SAND, trace silt - Well graded SAND (SW)	PID = 0 ppm 12:05			3 7 9 15	18" Recovery
66							
68							
70							
	S-17	Very loose to med. dense, moist, green to brown, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 13:35		WC2-1D/ S-17 For TOC and CEC Analysis	3 5 10 19	12" Recovery
72							
74							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-1D

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 6 OF 10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
76	S-18	Med. dense, moist, gray, f SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 13:55			9 17 23 23	14" Recovery
78							
80	S-19	Med. dense, moist, gray, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 14:10			10 13 22 22	14" Recovery
82							
84	S-20	Med. dense, moist, gray, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm			5 15 20 22	14" Recovery
86							
88							
90							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-1D

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 7 OF 10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
92	S-21	Loose to med. dense, moist, gray, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 14:50			3 5 8 15	16" Recovery
94							
95	S-22	Loose to med. dense, moist, gray, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 15:10			7 13 20 24	18" Recovery
96							
97							
98							
100	S-23	Loose to med. dense, moist, gray, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 15:50			10 25 28 24	18" Recovery
102							
104							
105	S-24	Med. dense, moist, gray, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 16:10			10 15	24" Recovery
106							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC2-1D**

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 8 OF 10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
	S-24					23 27	
108							
110							
	S-25	Loose, moist, gray, silty f. SAND - Silty SAND (SM)	PID = 0 ppm 4/6/99 8:45			3 5 11 12	18" Recovery
112							
114							
	S-26	Loose, moist, green to brown, silty f. SAND - Silty SAND (SM)	PID = 0 ppm 9:00			4 6 10 14	16" Recovery
116							
118							
120							
	S-27	Loose to med. dense, moist, green to brown, f. SAND, some silt - Silty SAND (SM)	PID = 0 ppm 9:25		WC2-1D/S27 For TOC & CEC Analysis	4 9 20 25	14" Recovery
122							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC2-1D**

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 9 OF 10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
124							
125							
	S-28	Loose to med. dense, moist, green to brown, f. SAND, some silt - Silty SAND (SM)	PID = 0 ppm 9:40			6 13 15 25	12" Recovery
126							
127							
128							
130							
	S-29	Loose to med. dense, moist, greenish-gray, f. SAND, some silt - Silty SAND (SM)	PID = 0 ppm 10:45			4 6 12 15	18" Recovery
132							
134							
135							
	S-30	Loose to med. dense, moist, greenish-gray, m-f SAND, some silt - Poorly Graded Sand, Silty SAND (SP-SM)	PID = 0 ppm 11:00			3 5 5 7	18" Recovery
136							
137							
138							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC2-1D**

HTW DRILLING LOG

HOLE No. **WC2-1D**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	10	10 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
140							
	S-31	Dense, moist, greenish-brown, m-f SAND, trace f. gravel, silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 11:50		WC2-1D/ S-31 Sampled for TOC and CEC Analysis	25 42 25 22	24" Recovery
142							
144							
145							
	S-32	Dense, moist, greenish-brown, c-f SAND, trace f. gravel - Poorly graded SAND (SP) GLACIAL DEPOSITS	PID = 0 ppm 13:30			13 19 17 29	24" Recovery
146							
147							
148							
150							
	S-33	Dense, gravish brown, m-f SAND, trace f. gravel - Poorly graded SAND (SP)	PID = 0 ppm 14:35			100/5"	
		END OF BORING					Auger refusal at 150.5 ft
152							
154							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-1D

BORING LOG

HOLE No. **WC2-1I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 1 SHEET
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4 " ID, 5-foot augers	8. HOLE LOCATION: Approximately 5 ft from NW corner of B-58 (Area No. 2)	
	9. SURFACE ELEVATION: + 6.83 feet	
	10. DATE STARTED: 4/8/99	11. DATE COMPLETED: 4/8/99
12. OVERBURDEN THICKNESS: > 55 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5 feet	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 5.2 ft bgs	
14. TOTAL DEPTH OF HOLE: 55 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A			N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
52							Driller augered directly down to 55 ft(from g.s.). The split-spoons were not used while advancing the borehole. For a characterization of the soil, **please refer to WC2-ID.**
54							
55		END OF BORING					
56							
58							
60							

BORING LOG

HOLE No. **WC2-1S**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 2 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 85 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2 " OD split spoon; 4 1/4", 5-foot augers	8. HOLE LOCATION: In Area No. 2, Near S-E corner of building B-58.	
	9. SURFACE ELEVATION: + 6.27 feet	
	10. DATE STARTED: 4/9/99	11. DATE COMPLETED: 4/14/99
12. OVERBURDEN THICKNESS: > 12 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 4 feet bgs	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 4.4ft bgs	
14. TOTAL DEPTH OF HOLE: 12 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5							
	S-1	Loose, moist, brown, f SAND, trace m-c sand and f. gravel - Poorly graded SAND (SP) FILL LAYER	PID = 0 ppm 9:25			5 5 93 100 / 1"	Recovery 7" Penetration 19" Hit pipe in RUN 1 End of boring
2							
2.5	S-2	Loose, moist, brown f. SAND, some silt, trace micaceous sand, exhibits a petroleum-like odor - Silty-SANDS (SM)	Headspace = 1.7 ppm 10:15			4 3 4 5	RUN 2
4		**W.T.**					
4.5	S-3	Loose, wet, black, gravelly, m-f SAND, some f. gravel, - Poorly Graded SAND (SP)	**PID = 147 ppm 10:25**			4 6 7 7	12" Recovery **Sample is oil-stained and exhibits a petroleum-like odor. See field results for S-3.**
6							
6.5	S-4	Loose, wet, brown, c-f SAND, trace f. gravel and micaceous sand, Poorly Graded SANDS (SP)	**PID = 26.9 ppm 10:35**			3 5 6 9	13" Recovery **Sample is oil-stained and a petroleum-like odor is evident. See field screening results for S-4.**
8							
8.5	S-5	Loose, wet, brown, m-f SAND, trace f. gravel, trace silt - Poorly Graded SAND (SP) FILL LAYER	PID = 0 ppm 10:50			1 4 4	8" Recovery **A slight petroleum-like odor is evident.**
10							

HTW DRILLING LOG

HOLE No. **WC2-1S**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	2	2 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					8	
12		END OF BORING					
14							
15							
16							
17							
18							
20							
22							
24							
25							
26							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-1S

BORING LOG

HOLE No. **WC2-2D Run 1**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 5 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 85 Truck Mounted Drill Rig
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoons; 4 1/4" ID, 5' augers	8. HOLE LOCATION: Northeastern section Area No. 2, east of building B-19.
	9. SURFACE ELEVATION: + 7.78 feet
	10. DATE STARTED: 3/30/99 — 11. DATE COMPLETED: 3/31/99
12. OVERBURDEN THICKNESS: 62 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 6 feet
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS AFTER WELL DEVELOPMENT: N/A
14. TOTAL DEPTH OF HOLE: 62 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
Sampled S-2, S-3, S-8, S-11 and S-14 for TOC and CEC Analysis.				TOC, CEC	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	X			Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Asphalt (3")					
		Loose to med. dense, moist, brown, f. SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 14:05			13	16" Recovery
		FILL LAYER				12	
2						7	
2.5	S-2					7	
		Increasing silt content	PID = 0 ppm 14:10		WC2-2D/S-2 Sampled for TOC and CEC Analysis	4	14" Recovery
						3	
4						2	
4.5	S-3					4	
		Med. dense, brown, m-f SAND, trace f. gravel to c. sand - Poorly graded SAND (SP)	PID = 0 ppm 14:35		WC2-2D/S-3 Sampled for TOC and CEC Analysis	4	18" Recovery
						10	
6		**W.T.**				14	
6.5	S-4					13	
		Loose to med. dense, wet, lt. brown, m-c SAND, trace f. gravel - Poorly graded SAND (SP)	PID = 0 ppm 14:40			5	24" Recovery
						9	
8						8	
8.5	S-5					10	
		Loose, wet, greenish-gray, m-c SAND, trace f. gravel, silt - Poorly graded SAND (SP)	PID = 0 ppm 15:00			3	24" Recovery
		FILL LAYER				6	
10						11	

HTW DRILLING LOG

HOLE No. **WC2-2D Run 1**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 2 OF 5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					11	
12							
14							
15		No Sample Retrieved				5	No Recovery
16	S-6					5	
						5	
17						4	
18							
20							
	S-7	Dense, moist, lt. brown, m-f SAND, trace f. gravel - Poorly graded SAND (SP)	PID - 0 ppm 15:20			6	24" Recovery
		GLACIAL DEPOSITS				25	
22						38	
						57	
24							
25							
26	S-8	Med. dense to dense, moist, yellowish-orange, f. SAND, trace silt - Poorly graded SAND, with silt (SP-SM)	PID - 0 ppm 15:30		WC2-2D/S-8 Sampled for TOC and CEC Analysis	11	24" Recovery
						23	

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-2D Run 1

HTW DRILLING LOG

HOLE No. **WC2-2D Run 1**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 3 OF 5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					30 40	
28							
30							
	S-10	Loose to med. dense, wet, yellowish-orange, f. SAND, trace silt - Poorly graded SAND (SP-SM)	PID = 0 ppm 15:40			4 6 14 20	24" Recovery
32							
34							
35							
	S-11	Loose to med. dense, moist, yellowish-orange, f. SAND, trace gravel, silt - Poorly graded SAND (SP-SM)	PID - 0 ppm 15:55			3 5 9 11	24" Recovery
36							
37							
38							
40							
	S-12	Loose to med. dense, moist, yellowish-orange, f. SAND, trace gravel, silt - Poorly graded SAND with silt (SP-SM)	PID - 0 ppm 16:10			4 9 13 26	24" Recovery
42							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-2D Run 1

HTW DRILLING LOG

HOLE No. **WC2-2D Run 1**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	4	5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-13	Loose to med. dense, greenish-gray, m-f SAND, trace gravel, silt - Poorly Graded SANDS (SP)	PID - 0 ppm 3/31/99 9:20			6 13 20 20	20" Recovery
46							
47							
48							
50	S-14	Loose to med. dense, moist, greenish-gray, m-f SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID - 0 ppm 9:30		WC2-2D/ S-14 Sampled for TOC and CEC Analysis	4 7 11 14	20" Recovery
52							
54							
55	S-15	Loose to med. dense, moist, greenish-gray, f. SAND, trace silt - Poorly graded SAND (SP) GLACIAL DEPOSITS	PID - 0 ppm 9:50			4 7 11 14	20" Recovery S-14
56							
57							
58							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-2D Run 1

HTW DRILLING LOG

HOLE No. **WC2-2D Run 1**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	5	5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
60		SEE REMARKS →					Auger hit hard (presumably rock) layer at 59 ft. Tried unsuccesfully to drive spoon. Then tried to auger through it and hit refusal at 62 ft No sample taken
62		END OF BORING					
64							
65							
66							
67							
68							
70							
72							
74							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-2D Run 1

BORING LOG

HOLE No. **WC2-2D Run 2**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 1 SHEET
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 85 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD splitspoons; 4 1/4" ID, 5' augers; Core barrel	8. HOLE LOCATION: Northeastern section of Area No. 2, east of building B-19.	
	9. SURFACE ELEVATION: + 7.78 feet	
	10. DATE STARTED: 4/1/99	11. DATE COMPLETED: 4/2/99
12. OVERBURDEN THICKNESS: 62 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 6 feet below ground surface	
13. DEPTH DRILLED INTO ROCK: 5	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 5.6 ft bgs	
14. TOTAL DEPTH OF HOLE: 67 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
			1

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
					59 inches

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
60		GLACIAL DEPOSITS					Driller augered down directly to 60'(from g.s.). No spoons were driven at earlier intervals. See boring log WC2-2D Run 1 for description.
	S-15	Medium dense, moist, greenish-gray f. SAND - Poorly graded SAND (SP)				22	24" Recovery S-15
		Dense, olive-gray, gravely, c-f SAND - Poorly graded SAND (SP)				26	
						34	
62		Olive-gray rubble				51	
		Core Run #2 Schist, gray, medium, grained, thickly-bedded, strong (top 1.5' feet) Legend N-naturally occuring fracture M-mechanical break/fracture (occurred during core run) Note Naturally occurring fracture was caused by faulting.		Core WC2-2DA **Penetration = 60"** **Recovery = 59"** **Strength = Strong** **Hardness = Mod. Hard** **Sum of Lengths Intact = 53.2 inches** **RQD = Sum of L Intact/ Pen. = 53.2/60 = 0.89** **Recovery % = Recov./Pen x 100% = 59/60x100% = 98.3%**		6 min	Spoon Hit Refusal at 62'
64						6 min	
						5 min	
						5 min	
66						5 min	Penetration to 67'
		END OF BORING					
68							

BORING LOG

HOLE No. **WC2-2I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 4 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD splitspoons; 4 1/4" ID, 5' augers	8. HOLE LOCATION: East of B-16, between B-16 and Causeway (in Area No. 2).	
	9. SURFACE ELEVATION: + 7.47 feet	
	10. DATE STARTED: 3/26/99	11. DATE COMPLETED: 3/29/99
12. OVERBURDEN THICKNESS: > 55 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5.5 feet	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 4.7 ft bgs	
14. TOTAL DEPTH OF HOLE: 55 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Concrete (6")					
		Med. dense, moist, brown, f. SAND, trace gravel - Poorly graded SAND (SP) FILL LAYER	PID = N/A 13:35			4 28 13 11	20" Recovery
2							
2.5	S-2	Med. dense to very dense, moist, brown, f. SAND, some silt, trace gravel - Silty SAND (SM)	PID = N/A 13:40			15 49 50/3"	8" Recovery 15" Penetration
4							
4.5	S-3					18	No Recovery
		W.T.				21	
6	S-3					18 14	
6.5	S-4					10	No Recovery
						10 13	
8						12	
8.5	S-5	Loose, wet, black, m-f SAND, trace f. gravel to c. sand, - Poorly Graded SAND (SP) FILL LAYER	PID = 95.1 ppm 8:35			3 4 5	15" Recovery **Oil stains(black) and petroleum-like odors are evident.**
10							

HTW DRILLING LOG

HOLE No. **WC2-2I**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 2 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					9	
12							
14							
15	S-6	Very soft, wet, dk. gray, low plasticity, ORGANIC SILT - ORGANIC SILT (ML-OL)	PID = 0 ppm 8:45			1	24" Recovery
16		ESTUARINE SILT				1	
						1	
17						1	
18							
20	S-7	Very soft, wet, dk. gray, low plasticity, ORGANIC SILT - ORGANIC SILT (ML-OL)	PID = 13.8 ppm H_2S = 32 ppm 9:00			1	24" Recovery
						1	
						1	
22						1	
24							
25	S-8	Very soft, wet, dk. gray, low plasticity, ORGANIC SILT - ORGANIC SILT (ML-OL)	PID = 4.8 ppm H_2S = 21 ppm 9:10			1	24" Recovery
26						2	

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-2I

HTW DRILLING LOG

HOLE No. **WC2-2I**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 3 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					2 2	
28							
30							
30	S-9	Very soft, wet, dk. gray, low plasticity, ORGANIC SILT - ORGANIC SILT (ML-OL)	PID = 0 ppm H_2S = 76 ppm 9:20			1 2 2 2	24" Recovery
32							
34							
35							
36	S-10	Very soft, wet, dk. gray, low plasticity, ORGANIC SILT - ORGANIC SILT (ML-OL)	PID = 0 ppm H_2S = 34 ppm 9:35			1 1 3 3	24" Recovery
37							
38							
40							
40	S-11	Very soft, dk. gray, low plasticity, ORGANIC SILT - ORGANIC SILT (ML-OL) ESTUARINE SILT Increasing sand content	PID = 0 ppm 9:55			4 2 5 9	24" Recovery
42							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-2I

HTW DRILLING LOG

HOLE No. **WC2-2I**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	4	4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-12	Med. dense, wet, reddish brown, f. gravelly m-f SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 10:10			2 8 19 24	24" Recovery
46		GLACIAL DEPOSITS					
47							
48							
50	S-13	Loose to med. dense, wet, brown, f. SAND - Poorly graded SAND (SP)	PID = 0 ppm 10:20			4 8 10 11	16" Recovery
52							
54							
55	S-14	Loose to med. dense, wet, brown, f. SAND - Poorly graded SAND (SP)	PID = 0 ppm 10:35			3 8 10 10	16" Recovery S-14
56		GLACIAL DEPOSITS					
57		END OF BORING					
58							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-2I

BORING LOG

HOLE No. **WC2-3D**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 6 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 85 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD splitspoons; 4 1/4" ID, 5' augers; Core barrel	8. HOLE LOCATION: Near NW end of B-8 in Area No. 2	
	9. SURFACE ELEVATION: + 7.73 feet	
	10. DATE STARTED: 4/9/99	11. DATE COMPLETED: 4/13/99
12. OVERBURDEN THICKNESS: 84.5 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5.2 feet	
13. DEPTH DRILLED INTO ROCK: 5 feet	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 5.5 ft bgs	
14. TOTAL DEPTH OF HOLE: 90 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	X		1

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
Samples were taken for S-2, S-4, S-6, S-10, S-12 and S-17 for TOC & CEC Analysis.				TOC, CEC	55 inches

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Loose, moist, brown to dk. brown, silty f. SAND, trace gravel - Silty SAND (SM) FILL LAYER	PID = 0 ppm 14:05			6 9 3 3	16" Recovery
2							
2.5	S-2	Very soft, moist, dk. brown, low plastic, sandy SILT (ML)	PID = 0 ppm 14:10		WC2-3D/S-2 Sampled for TOC, CEC Analysis	2 2 2 1	20" Recovery
4							
4.5	S-3	**W.T.**	PID = 0 ppm			1 1 1 WOR	No Recovery
6							
6.5	S-4	Moist, brown, silty f. SAND - Silty SAND (SM)	PID = 0 ppm 14:20		WC2-3D/S-4 Sampled for TOC, CEC Analysis		18" Recovery
8							
8.5	S-5	Loose, brown, f. SAND - Poorly graded SAND (SP) FILL LAYER	PID = 0 ppm			2 5 7	16" Recovery
10							

HTW DRILLING LOG

HOLE No. **WC2-3D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 2 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					10	
12							
14							
15	S-6	Loose, wet, lt. brown, m-c SAND, some gravel - Poorly graded SAND (SP) GLACIAL DEPOSITS	PID = 0 ppm 14:45		WC2-3D/S-6 for TOC and CEC Analysis	5 7 8 11	24" Recovery S-6
16							
17							
18							
20	S-7	Loose, wet, lt. brown, m-c SAND, some gravel - Poorly Sorted SANDS (SP)	PID = 0 ppm 14:55			3 7 8 12	14" Recovery
22							
24							
25	S-8	Med. dense,wet, dk. brown, m-c SAND, some f. gravel - Poorly Sorted SANDS (SP)	PID = 0 ppm 15:05			21 25	20" Recovery
26							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-3D

HTW DRILLING LOG

HOLE No. **WC2-3D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 3 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					27 23	
28							
30							
32	S-9	Med. dense, wet, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 15:15			8 8 13 17	18" Recovery
34							
35							
36	S-10	Med. dense, wet, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 15:30		Sampled WC2-3D/ S-10 For TOC & CEC Analysis	8 16 18 18	18" Recovery
37		INCREASING FINES					
38							
40							
42	S-11	Med. dense, wet, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 12-Apr-99 8:10				14" Recovery

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-3D

HTW DRILLING LOG

HOLE No. **WC2-3D**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 4 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-12	Med. dense, wet, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 8:25		Sampled WC2-3D/ S-12 for TOC and CEC Analysis	3 8 11 9	18" Recovery
46							
47							
48							
50	S-13	Loose, wet, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 8:40			3 3 5 5	6" Recovery
52							
54							
55	S-14	Loose, moist, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 8:55			4 7 9 9	12" Recovery
56							
57							
58							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-3D

HTW DRILLING LOG

HOLE No. **WC2-3D**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 5 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
60		INCREASING FINES					
62	S-15	Loose, wet, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 9:15			2 2 3 5	9" Recovery
64							
65							
66	S-16	Med. dense, moist, tan, f. SAND, trace silt - Poorly graded SAND (SP)	PID = 0 ppm 9:30			5 8 10 14	18" Recovery
67							
68							
70	S-17	Med. dense to dense, wet, brown, c-f SAND, some f. gravel, c. sand - Well graded SAND (SW)	PID = 0 ppm 9:40		Sampled WC2-3D/ S-17 for TOC and CEC Analysis	9 24 35 40	12" Recovery
72							
74							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

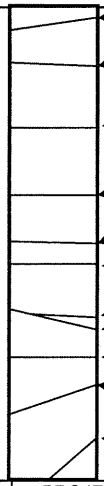
HOLE No.
WC2-3D

HTW DRILLING LOG

HOLE No. **WC2-3D**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	6	6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
75							
	S-18	Loose to med. dense, brown, c-f SAND, some f. gravel, c. sand - Poorly graded SANDS (SP)	PID = 0 ppm 10:05			5 7 10 14	19" Recovery
76							
77							
78							
80							
	S-19	Med. dense, brown, m-c SAND, some gravel, till - Poorly graded SAND (SP) GLACIAL DEPOSITS Increasing silt content	PID = 0 ppm			11 11 21 30	14" Recovery
82							
84							
84.5						50 / 1"	Auger hits refusal at 85'1".
85		Core Run #1 Phyllite, gray, fine-grained, thickly-bedded, strong (throughout core) Legend N-Naturally occuring fracture M-mechanical break (occurred during core run) Note All naturally occurring fractures are caused by faulting.		Core WC2-3D (Run #1) Penetration = 60 " Recovery = 55 " Strength = Strong Hardness = Mod. Hard Sum of Lengths intact = 45.1" RQD = Sum of L intact / Pen. = 45.1/60 = 0.75 Recovery % = Recovery/ Pen x 100% = 55/60 x 100% = 92%		8 min 7 min 5 min 6 min 6 min	
86							
88							
90		END OF BORING					Penetration stopped at 90'1".



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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-3D

BORING LOG

HOLE No. **WC2-3I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 4 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4" ID, 5-foot augers	8. HOLE LOCATION: Northeast side of B-16, near causeway entrance (in Area No. 2).	
	9. SURFACE ELEVATION: + 6.17 feet	
	10. DATE STARTED: 3/25/99	11. DATE COMPLETED: 3/26/99
12. OVERBURDEN THICKNESS: > 55 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 6 feet below ground surface	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 3.7 ft bgs	
14. TOTAL DEPTH OF HOLE: 55 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Asphalt (2")					
		Med. dense, moist, lt. brown, m-f SAND, some c. sand, trace gravel - Poorly Graded SANDS (SP)	PID = 0 ppm 10:30			20	20" Recovery
		FILL LAYER				25	
2						13	
2.5	S-2					23	
		Loose, moist, lt. brown, m-f SAND, some c. sand, trace gravel - Poorly Graded SANDS (SP)	PID = 0 ppm 10:40			13	24" Recovery
						18	
4						13	
4.5	S-3	Soil density downgrades to loose				8	
		Very loose, wet, lt. brown, m-f SAND, some c. sand, trace gravel - Poorly Graded SANDS (SP)	PID = 0 ppm 10:45			8	1" Recovery
						3	
6		**W.T.**				3	
6.5	S-4		PID = 0 ppm 10:55			2	
						3	4" Recovery
						2	
8						3	
8.5	S-5					4	
		Very loose, wet, olive gray, c-f SAND, some silt, trace gravel - Poorly Graded SAND (SP)	PID = 0 ppm 11:05			3	10" Recovery
		FILL LAYER				2	
10						2	

HTW DRILLING LOG

HOLE No. **WC2-3I**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 2 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					3	
12							
14							
15		Soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. sand ORGANIC SILT - (OL)	PID = 0 ppm 11:20			1	24" Recovery
16	S-6	ESTUARINE SILT				2	
17						3 3	
18							
20		Soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. sand ORGANIC SILT - (OL)	PID = 0 ppm 11:30			1	24" Recovery
22						1 1 3	
24							
25	S-8	Soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. sand ORGANIC SILT - (OL)	PID = 7.7 ppm H_2S = 7.7 ppm 11:45			1	24" Recovery
26						2	

HTW DRILLING LOG

HOLE No. **WC2-3I**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 3 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					2 2	
28							
30							
32	S-9	Soft, moist, dk. gray, low plasticity, ORGANIC SILT, some f. sand ORGANIC SILT - (OL)	Headspace = 2.2 ppm 12:00			WOR 2 2 3	24" Recovery
34							
35							
36	S-10	Soft, moist, dk. gray, low plasticity, ORGANIC SILT, trace f. sand, trace organic debris (OL)	Headspace = 2.1 ppm 13:10			1 2 2 3	24" Recovery
37							
38							
40							
42	S-11	Soft, moist, dk. gray to black, low plasticity, ORGANIC SILT, trace organic debris (OL) ESTUARINE SILT	PID = 0 ppm 13:25			3 3 3 5	24" Recovery

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-3I

HTW DRILLING LOG

HOLE No. **WC2-3I**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 4 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-12	Med. dense, moist, gray, c-f SAND, some gravel - Well graded SAND (SW) GLACIAL DEPOSITS	PID = 0 ppm 13:45			5 6 13 21	24" Recovery
46							
47							
48							
50	S-13	Med. dense, moist, yellowish-orange, m-f SAND - Poorly graded SAND (SP)	PID = 0 ppm 14:00			15 17 15 16	24" Recovery
52							
53	S-14	Med. dense, moist, yellowish-orange, m-f SAND, trace micaceous sand - Poorly Graded SANDS (SP) GLACIAL DEPOSITS	PID = 0 ppm 14:20			18 13 13 20	12" Recovery
54							
55							
56		END OF BORING					
57							
58							

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URSGWC Federal Services
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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-3I

BORING LOG

HOLE No. **WC2-3S**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 1 SHEET	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4" ID, 5-foot augers	8. HOLE LOCATION: On walkway between B-16 and berm fence(in Area No. 2).
	9. SURFACE ELEVATION: + 7.02 feet
	10. DATE STARTED: 3/29/99 — 11. DATE COMPLETED: 3/30/99
12. OVERBURDEN THICKNESS: > 12 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5.5 feet
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 5.9 ft bgs
14. TOTAL DEPTH OF HOLE: 12 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
			N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
6	▼	**W.T.**					Driller augered down directly to 12 ft(from g.s.). Split spoons were not used during the advancing of the hole. For a characterization of the soil within the same area as this well, **please refer to WC2-2I.**
8							
10							
12		END OF BORING					
14							

BORING LOG

HOLE No. **WC2-4I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 3 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Joseph Yarrow	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile B53	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5' augers	8. HOLE LOCATION: South Eastern Section of Site(South of Sniffens Lane)	
	9. SURFACE ELEVATION: 7.61 feet	
	10. DATE STARTED: 10/26/99	11. DATE COMPLETED: 10/26/99
12. OVERBURDEN THICKNESS: > 37 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 4 feet	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT	
14. TOTAL DEPTH OF HOLE: 37 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
Yes	X		none

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A	no	no	no	no	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	yes	X		Steve G. Vallianos

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
		Asphalt					Drilled through one foot of asphalt.
2	S1	V. dense, moist, lt. brown, m-f SAND, trace gravel (SP) FILL LAYER	PID = 0.0 ppm 16" Recovery			12 22 29 30	Installed 4" I.D. Casing
4	S2	V. dense, wet, lt. brown, m-f SAND, trace gravel (SP) FILL LAYER **W.T.**	PID = 0.0 ppm 20" Recovery			25 30 32 28	
6	S3	M. dense, wet, brown, f-c SAND, trace f. gravel (SW) FILL LAYER	PID = 200 ppm 12" Recovery			6 11 16 18	
8	S4	Same as S-3 FILL LAYER	PID = 200 ppm 24" Recovery			12 11 11 14	
10	S5	M. dense, brown-grey, gravelly SAND (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 14" Recovery			3 6	

HTW DRILLING LOG

HOLE No. **WC2-4I**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 2 OF 3 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
	S5					12 30	
12							
14							
15	S-6	V. dense, wet, olive-grey, f. SAND, trace m. sand, trace silt (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 19" Recovery			8 25 32 48	
16							
17							
18							
20	S-7	V. dense, wet, tan, f. SAND, trace m. sand (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 23" Recovery			22 20 43 100/5"	
22							
24							
25	S-8	M. Dense, gray-brown, m-f SAND (SP)	PID = 0.0 ppm 8" Recovery			3 8	
26							

HTW DRILLING LOG

HOLE No. **WC2-4I**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Steve G. Vallianos
SHEET 3 OF 3 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8	GLACIAL DEPOSITS				11 13	
28							
30	S-9	V. dense, red-brown, gravelly SAND (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 18" Recovery			6 18 39 39	
32							
34							
35	S-10	V. dense, grey-brown, f-c SAND, little f. gravel (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 13" Recovery			24 24 33 42	Used roller-bit with drilling fluid (water) to reach required depth of 35 feet bgs.
36							
37		END OF BORING AT 37' BELOW GROUND SURFACE.					
38							
40							
42							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-4I

BORING LOG

HOLE No. **WC2-4S**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 2 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 truck-mounted drill rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4" ID, 5' foot augers	8. HOLE LOCATION: In NE section of Area No. 2, SW of building B-19.	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 3/21/99	11. DATE COMPLETED: 3/22/99
12. OVERBURDEN THICKNESS: > 12 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5 feet below ground surface	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 5.2 ft bgs	
14. TOTAL DEPTH OF HOLE: 12 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
			N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0		Concrete (9")					No geotechnical samples were collected for this well
0.75	S-1	Loose, moist, brown, f. SAND, some f. gravel to c. sand, trace silt - Poorly Graded SAND with silt (SP-SM) FILL LAYER	PID = 0 ppm 15:15			8 8 10 8	12" Recovery
2							
2.75	S-2	Med. dense, moist brown, f. SAND - Poorly Graded SAND (SP)	PID = 0 ppm 15:20			12 14 13 16	24" Recovery
4							
4.75	S-3	Loose, wet, brown, f. SAND, trace f. gravel to c. sand - Poorly graded SAND (SP)	PID = 0 ppm 15:25			3 5 7 10	16" Recovery
W.T.							
6							
6.75	S-4	Loose, wet, brown, f. SAND, trace f. gravel to c. sand - Poorly graded SAND (SP)	PID = 0 ppm 15:30			6 6 8	24" Recovery
8							
8.75	S-5	Loose, wet, brown, f. SAND, trace f. gravel to c. sand - Poorly graded SAND (SP) FILL LAYER	PID = 0 ppm 15:35			5 5 7	6" Recovery
10							

HTW DRILLING LOG

HOLE No. **WC2-4S**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 2 OF 2 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.75	S-5	END OF BORING				14	
12							
14							
15							
16							
17							
18							
20							
22							
24							
25							
26							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-4S

BORING LOG

HOLE No. **WC2-5I**

1. COMPANY NAME	URSGWC Federal Services
2. DRILLING SUBCONTRACTOR	Connecticut Test Borings
SHEET / OF	1 / 4 SHEETS
3. PROJECT	Stratford Army Engine Plant Remedial Investigation
4. LOCATION	Stratford, Connecticut
5. NAME OF DRILLER	Joseph Yarrow
6. MANUFACTURER'S DESIGNATION OF DRILL	Mobile B53
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	2" OD, split spoon 4 1/4" ID, 5' augers
8. HOLE LOCATION	South Eastern Section of Site(in parking lot by building 19)
9. SURFACE ELEVATION	9.34 feet
10. DATE STARTED	10/25/99
11. DATE COMPLETED	10/25/99
12. OVERBURDEN THICKNESS	> 42 feet
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	42 feet
15. DEPTH GROUNDWATER ENCOUNTERED	7.3 @ 1045hrs feet
16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT	
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
Yes	X		none

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A	no	no	no	no	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	yes	X		Steve G. Vallianos

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
		Asphalt					Drilled through one foot of asphalt.
2	S1	Dense, moist,brown, m-f SAND, (SP) FILL LAYER	PID = 0.0 ppm 12" Recovery			13 12 20 26	
4	S2	Dense, moist, white-brown, m-f SAND, (SP) FILL LAYER	PID = 0.1 ppm 18" Recovery			19 19 20 32	
6	S3	V. dense, moist, brown, m-f SAND, trace f. gravel (SP) FILL LAYER	PID = 0.2 ppm 16" Recovery			25 26 24 22	
8	S4	**W.T.** V. dense, wet, brown, m-c SAND, trace f. gravel (SP) FILL LAYER	PID = 0.2 ppm 18" Recovery			52 48 50 43	
10	S5	Dense, brown, f-c SAND, little gravel (SP) FILL LAYER	PID = 0.0 ppm 14" Recovery			6 12	

HTW DRILLING LOG

HOLE No. **WC2-5I**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 2 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
	S5					19 21	
12							
14							
15	S-6A	V. dense, wet, brown, gravelly SAND (SP) FILL LAYER	PID = 0.0 ppm 18" Recovery			8 43	
16	S-6B	V. dense, wet, tan, f-m SAND trace silt (SP) GLACIAL DEPOSITS				100/6"	
17							
18							
20	S-7	V. dense, tan, f. SAND, trace silt (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 12" Recovery			7 26 43 82	
22							
24							
25	S-8	V. Dense, tan, m-f SAND (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 10" Recovery			75 100/4"	
26							

HTW DRILLING LOG

HOLE No. **WC2-5I**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Steve G. Vallianos	3	4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8						
28							
30							
32	S-9	V. dense, tan, f. SAND, little f. micaceous sand, trace silt (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 6" Recovery			14 49 100/5"	Used drilling fluid (water) to prevent SANDS from running into the Hollow Stem Auger.
34							
35							
36	S-10	Loose, tan, m-f SAND (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 13" Recovery			3 3 5 16	
37							
38							
40							
42	S-11	No Recovery	No Recovery			6 8 19 57	

HTW DRILLING LOG

HOLE No. **WC2-5I**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 4 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
		END OF BORING AT 42' BELOW GROUND SURFACE.					
44							
45							
46							
47							
48							
50							
52							
54							
55							
56							
57							
58							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC2-5I**

BORING LOG

HOLE No. **WC2-5S**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 2 SHEETS
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME Truck Mounted Drill Rig	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5-foot augers	8. HOLE LOCATION: Northeastern section of Area No. 2 by the SE corner of building B-19.	
	9. SURFACE ELEVATION	
	10. DATE STARTED: 4/2/99	11. DATE COMPLETED: 4/14/99
12. OVERBURDEN THICKNESS: > 12 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5 feet below ground surface	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 7.5 ft bgs	
14. TOTAL DEPTH OF HOLE: 12 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Asphalt (3")					
		Loose, moist, brown, f. SAND - Poorly graded SAND (SP)	PID = 0 ppm 10:20			5	20" Recovery
		FILL LAYER				5	
2						6	
						9	
2.5	S-2	Med. dense, moist, brown, f. SAND Poorly graded SAND (SP)	PID = 0 ppm 10:25			10	14" Recovery
						12	
4						13	
						12	
4.5	S-3	Med. dense, wet, brown, m-f SAND, some f. gravel to c. sand - Poorly Graded SAND (SP)	PID = 0 ppm 10:30			4	22" Recovery
W.T.						11	
						18	
6						22	
6.5	S-4	Med. dense, wet, brown, c-f SAND, some gravel - Well graded SAND (SW)	PID = 0 ppm			6	20" Recovery
						11	
						15	
8						18	
8.5	S-5	Med. dense, wet, brown, c-f SAND, some gravel - Well graded SAND (SW)	PID = 0 ppm			12	20" Recovery
		FILL LAYER				11	
10						12	

HTW DRILLING LOG

HOLE No. **WC2-5S**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 2 OF 2 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5	END OF BORING				16	
12							
14							
15							
16							
17							
18							
20							
22							
24							
25							
26							

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URSGWC Federal Services
Log prepared 7/25/02

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC2-5S

BORING LOG

HOLE No. **WC2-6I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 4 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Joseph Yarrow	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile B53
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5' augers	8. HOLE LOCATION: South Eastern Section of Site(east of tank farm pad next to the birm)
	9. SURFACE ELEVATION: 6.96 feet
	10. DATE STARTED: 10/26/99 — 11. DATE COMPLETED: 10/27/99
12. OVERBURDEN THICKNESS: > 52 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 4.6 (1320hrs on 10/26/99) feet
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 5.6 (1430hrs on 10/27/99)
14. TOTAL DEPTH OF HOLE: 52 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
Yes	X		none

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A	no	no	no	no	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	yes	X		Steve G. Vallianos

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
		Asphalt					Drilled through one foot of asphalt.
2	S1	M. dense, moist, brown, m-f SAND, trace gravel (SW) FILL LAYER	PID = 0.0 ppm 15" Recovery			8 12 10 12	Installed 4" I.D. Casing
4	S2	Same as S1 **W.T.**	PID = 0.0 ppm 6" Recovery			12 9 8 9	
6	S3	M. dense, wet, Black(oil stained), m-f SAND, trace gravel, petroleum-like odors, shean on water (SP) FILL LAYER	Hnu malfunctioning 6" Recovery			4 6 6 8	Petroleum-like odors and shean on water is evident.
8	S4A	Loose, black-grey (oil stained), wet, m-f SAND, trace gravel, petroleum-like odors shean on water (SP) FILL LAYER	PID = 200 ppm 20" Recovery PID = 150 ppm			3 3 2	Petroleum-like odors and shean on water is evident.
	S4B	Soft, black-grey, ORGANIC SILT (OH) ESTUARINE SILT LAYER	PID = 18 ppm			2	
10	S5	Dense, grey, m-f SAND, little silt, trace f. gravel, fuel-like odors (SM) FILL LAYER	PID = 0.0 ppm 10" Recovery			21 23	Petroleum like odors are evident.

HTW DRILLING LOG

HOLE No. **WC2-6I**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 2 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
	S5					20 21	
12							
14							
15	S-6	Dense, lt. grey, f-c SAND, trace f. gravel, slight fuel odor (SW) FILL LAYER	PID = 0.0 ppm 20" Recovery			8 11 28 48	sands getting darker ↓
16							
17							
18							
20	S-7	Dense, olive-grey, m-f micaceous SAND, trace silt (SP) FILL LAYER	PID = 0.0 ppm 15" Recovery			15 20 24 25	sands are getting finer ↓
22							
24							
25	S-8	Same as S-7	PID = 0.0 ppm 18" Recovery			10 15	sands becoming darker @ 26.7'.
26							

HTW DRILLING LOG

HOLE No. **WC2-6I**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 3 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					19 32	
28							
30							
	S-9	Dense, brown-grey, m-f micaceous SAND, trace gravel (SP) FILL LAYER	PID = 0.0 ppm 17" Recovery			8 16 24 33	
32							
34							
35							
	S-10	V. dense, tan, m-f micaceous SAND (SP) FILL LAYER	PID = 0.0 ppm 15" Recovery			13 26 33 35	
36							
37							
38							
40							
	S-11	M. dense, tan, m-f micaceous SAND, trace gravel (SP) FILL LAYER	PID = 0.0 ppm 24" Recovery			11 10 12 24	
42							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC2-6I**

HTW DRILLING LOG

HOLE No. **WC2-6I**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Steve G. Vallianos
SHEET 4 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45							
46	S-12	M. dense, brown, m-f SAND (SP) FILL LAYER	PID = 0.0 ppm 15" Recovery			3 7 17 25	
47							
48							
50	S-13A	V. dense, brown, f-c SAND, trace f. gravel (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 12" Recovery (for whole spoon)			13 51	
52	S-13B	V. dense, green-brown, f-c SAND, little weathered gravel (GP) GLACIAL DEPOSITS	(for whole spoon)			64 72	
54		END OF BORING AT 52' BELOW GROUND SURFACE.					
55							
56							
57							
58							

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URSGWC Federal Services
Log prepared 10/27/99

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC2-6I**

BORING LOG

HOLE No. **WC3-1D**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 6 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Joseph Yarrow	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile B53
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5' augers	8. HOLE LOCATION: Southern Section of West Parking lot
	9. SURFACE ELEVATION: 6.28'
	10. DATE STARTED: 11/1/99 — 11. DATE COMPLETED: 11/2/99
12. OVERBURDEN THICKNESS: 87 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 3.5 feet below ground surface feet
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 4.9' bgs - 16 hours
14. TOTAL DEPTH OF HOLE: 87 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
Yes	X		none

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
NA	no	no	no	no	n/a

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	yes	X		Steve G. Vallianos

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
		Asphalt					Drilled through one foot of asphalt.
2	S1	M. dense, moist, brown, m-f SAND, trace silt (SP) FILL LAYER	PID = 1.6 ppm 16" Recovery			14 12 7 7	
4	S2	M. dense, wet, grey-brown, f-c SAND, little gravel (SP) **W.T.** GLACIAL DEPOSITS LAYER	PID = 87 ppm 14" Recovery			12 12 15 39	Solvent odors are evident
6	S3	Dense, wet, grey-brown, f-c SAND, little gravel (SP) GLACIAL DEPOSITS LAYER	PID = 100 ppm 10" Recovery			11 20 27 23	Solvent odors are evident
8	S4	Dense, wet, grey-brown, m-f SAND, trace f. gravel (SP) GLACIAL DEPOSITS LAYER	PID = 59 ppm 24" Recovery			23 18 18 19	Solvent odors are evident
10						4 5	

HTW DRILLING LOG

HOLE No. **WC3-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 2 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
12	S5	M. dense, wet, grey-brown, c-f SAND, trace f. gravel (SP) GLACIAL DEPOSITS LAYER	PID = 3.0 ppm 12" Recovery			7 12 14 23	Solvent odors are evident
14							
15	S-6	Dense, wet, red-brown, f-c SAND, trace little gravel (SP) GLACIAL DEPOSITS LAYER	PID = 3.5 ppm 11" Recovery			12 23 30 33	
16							
17							
18							
20	S-7	Hard, tan, SILT and f. SAND (ML) GLACIAL DEPOSITS LAYER	PID = 3.4 ppm 13" Recovery			20 30 38 72	
22							
24							
25	S-8	V. dense, tan, f. SAND and SILT (ML) GLACIAL DEPOSITS LAYER	PID = 3.5 ppm 18" Recovery			29 37	
26							

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URSGWC Federal Services
Log prepared 11/2/99

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC3-1D

HTW DRILLING LOG

HOLE No. **WC3-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 3 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					60 65	
28							
30							
32	S-9	V. dense, f. micaceous SAND, trace silt (SP) GLACIAL DEPOSITS LAYER	PID = 3.0 ppm 11" Recovery			73 100/5"	Strong odors are evident
34							
35							
36	S-10	V. dense, tan, f. micaceous SAND, trace silt (SP) GLACIAL DEPOSITS LAYER	PID = 2.0 ppm 20" Recovery			38 46 81 86	Strong odors are evident
37							
38							
40							
42	S-11	M. dense, grey-brown, f. micaceous SAND, little silt (SP) GLACIAL DEPOSITS LAYER	hnu/pid malfunction 20" Recovery			8 11 13 15	Strong odors are evident

HTW DRILLING LOG

HOLE No. **WC3-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 4 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-12	V. dense, grey-brown, f. micaceous SAND, little silt (SP) GLACIAL DEPOSITS LAYER	hnu/pid malfunction 20" Recovery			13 19 34 40	Strong odors are evident
46							
47							
48							
50	S-13	Same as S-12	hnu/pid malfunction 24" Recovery			16 26 35 43	Strong odors are evident
52							
54							
55	S-14	Dense, grey-brown, SILT and f. SAND (ML) GLACIAL DEPOSITS LAYER	hnu/pid malfunction 18" Recovery 11/01/99			12 13 21 37	Strong odors are evident Concluded drilling activities for 11/01/99
56							
57							
58							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC3-1D

HTW DRILLING LOG

HOLE No. **WC3-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Steve G. Vallianos
SHEET 5 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
60							
	S-15	Same as S-14	hnu/pid malfunction 24" Recovery 11/01/99			18 21 28 43	Strong odors are evident
62							
64							
65	S-16	Dense, grey-brown, f. micaceous SAND, little silt (SP) GLACIAL DEPOSITS LAYER	hnu/pid malfunction 20" Recovery			11 7 24 18	Strong odors are evident
66							
67							
68							
70	S-17	Same as S-16	hnu/pid malfunction 18" Recovery			11 12 19 26	Strong odors are evident
72							
74							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC3-1D

HTW DRILLING LOG

HOLE No. **WC3-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 6 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
75							
	S-18	V. stiff, grey-brown, SILT and f. SAND, lenses of thin red clay (ML) GLACIAL DEPOSITS LAYER	hnu/pid malfunction 10" Recovery			13 9	Strong odors are evident
76						17	
77						44	Tip of split-spoon contains orange-brown f-m SAND (micaceous)
78							
80							
	S-19	V. dense, grey-brown, f. SAND, some f. gravel, little silt (SP) GLACIAL DEPOSITS LAYER	hnu/pid malfunction 15" Recovery			18 23 25 41	Strong odors are evident
82							
84							
85							
	S-20	Same as S-19	hnu/pid malfunction 10" Recovery			68 69 47 45	Strong odors are evident
86							
		END OF BORING					
88							
90							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC3-1D

BORING LOG

HOLE No. **WC3-1I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings	SHEET 1 OF 1 SHEET
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut	
5. NAME OF DRILLER: Joseph Yarrow	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile B53	
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5' augers	8. HOLE LOCATION: Southern Section of West Parking lot	
	9. SURFACE ELEVATION: 6.28'	
	10. DATE STARTED: 11/3/99	11. DATE COMPLETED: 11/3/99
12. OVERBURDEN THICKNESS: >40'	15. DEPTH GROUNDWATER ENCOUNTERED: Use WC3-1D as reference	
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT	
14. TOTAL DEPTH OF HOLE: 40 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No	none	none	none

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
NA	no	no	no	no	n/a

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	yes	X		Steve G. Vallianos

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
34							Driller augered down directly to 40 ft. The split spoons were not used during the advancing of the hole. For a characterization of the soil, please refer to WC3-1D.
36							
38							
40							
42		END OF BORING					

BORING LOG

HOLE No. **WC3-2D**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 5 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Joseph Yarrow	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile B53
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5' augers	8. HOLE LOCATION: Southern Section of West Parking lot
	9. SURFACE ELEVATION: 6.68'
	10. DATE STARTED: 10/28/99 — 11. DATE COMPLETED: 10/29/99
12. OVERBURDEN THICKNESS: 63 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 4.0 feet below ground surface feet
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT:
14. TOTAL DEPTH OF HOLE: 63 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
Yes	X		none

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A	no	no	no	no	N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	yes	X		Steve G. Vallianos

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
		Asphalt					Drilled through one foot of asphalt.
2	S1	M. dense, moist, red-brown, f. SAND, little silt (SP) FILL LAYER	PID = 0.0 ppm 12" Recovery			8 10 9 9	Installed 4" I.D. Casing
4	S2	M. dense, wet, brown, f-c SAND, trace gravel (SP) FILL LAYER **W.T.**	PID = 0.0 ppm 15" Recovery			6 9 17 32	
6	S3	No Recovery - No sample obtained				40 42 48 50	
8	S4	V. dense, wet, brown, f-c SAND, trace f. gravel (SW) GLACIAL DEPOSITS	PID = 0.0 ppm 20" Recovery			21 31 38 35	
10							

HTW DRILLING LOG

HOLE No. **WC3-2D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 2 OF 5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
	S5	V. dense, wet, brown, f-c SAND, trace f. gravel (SW) GLACIAL DEPOSITS	PID = 0.0 ppm 10" Recovery			7 24 30 34	
12							
14							
15	S-6	Dense, wet, grey, f-c SAND, trace f. gravel (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 15" Recovery			9 18 22 28	
16							
17							
18							
20							
	S-7	Same as S-6 GLACIAL DEPOSITS	PID = 0.0 ppm 16" Recovery			9 19	
		Brown, SANDY SILT (ML)				22 25	
22							
24							
25	S-8	V. dense, tan, micaceous f. SAND, trace silt (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 20" Recovery			47 72	
26							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC3-2D**

HTW DRILLING LOG

HOLE No. **WC3-2D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 3 OF 5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					80 100	
28							
30		Same as S-8	PID = 0.0 ppm 24" Recovery			24 29	
	S-9					31 50	
32							
34							
35		Same as S-8	PID = 0.0 ppm 16" Recovery			25 21	
36	S-10					22	
37						27	
38							
40		Same as S-8	PID = 0.0 ppm 21" Recovery			13 10	
	S-11					15	
42						20	

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC3-2D**

HTW DRILLING LOG

HOLE No. **WC3-2D**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Steve G. Vallianos	4	5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-12	Dense, tan, f. SAND, trace red silt lenses (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 24" Recovery			16 24 22 39	
46							
47							
48							
50	S-13	V. dense, tan, f. SAND, little silt (SM) GLACIAL DEPOSITS	PID = 0.0 ppm 20" Recovery			7 22 31 37	
52							
54							
55	S-14	V. dense, brown, m-f SAND, trace silt (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 17" Recovery			49 84 100/5"	
56							
57							
58							

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Log prepared 10/28/99

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC3-2D

HTW DRILLING LOG

HOLE No. **WC3-2D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Steve G. Vallianos

SHEET 5 OF 5 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
60							
	S-15A	V. dense, brown, m-f SAND, trace silt (SP) GLACIAL DEPOSITS	PID = 0.0 ppm 22" Recovery			34 64	
	S-15B	Hard, grey, SANDY SILT (ML) GLACIAL DEPOSITS				78 100/4"	
62							
		END OF BORING					
64							
65							
66							
67							
68							
70							
72							
74							

Modified MRK Form 55
URSGWC Federal Services
Log prepared 10/28/99

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC3-2D**

BORING LOG

HOLE No. **WC3-2I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 1 SHEET	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Joseph Yarrow	6. MANUFACTURER'S DESIGNATION OF DRILL: Mobile B53
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5' augers	8. HOLE LOCATION: Southern Section of West Parking lot
	9. SURFACE ELEVATION: 6.28 feet
	10. DATE STARTED: 10/29/99 — 11. DATE COMPLETED: 10/29/99
12. OVERBURDEN THICKNESS: >40'	15. DEPTH GROUNDWATER ENCOUNTERED: Use WC3-2D as reference
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT:
14. TOTAL DEPTH OF HOLE: 40 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY):

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
No	none	none	none

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
	no	no	no	no	n/a

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
	yes	X		Steve G. Vallianos

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
34							Driller augered down directly to 40 ft. The split spoons were not used during the advancing of the hole. For a characterization of the soil, please refer to WC3-2D.
36							
38							
40							
42		END OF BORING					

BORING LOG

HOLE No. **WC5-1D**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 6 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 85 Truck Mounted Drill Rig
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD, split spoon; 4 1/4" ID, 5' augers; Core Barrel	8. HOLE LOCATION: 10' West from the SW Corner of Main Building B-2, northern section of Area No. 3.
	9. SURFACE ELEVATION: + 7.75 feet
	10. DATE STARTED: 4/13/99 — 11. DATE COMPLETED: 4/14/99
12. OVERBURDEN THICKNESS: 85 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5 feet
13. DEPTH DRILLED INTO ROCK: 5	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 5.5 ft bgs
14. TOTAL DEPTH OF HOLE: 90 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	X		1

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
Samples taken from S-2 and S-6 for TOC and CEC Analysis.				TOC, CEC	55"

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
2	S-1	Loose, moist, brown, f SAND, trace gravel, trace organic debris (dead roots) (SP) FILL LAYER	PID = 0 ppm 15:05			1 3 8 7	18" Recovery The area is unpaved
4	S-2	Soft, moist, brown, sandy SILT (SM) FILL LAYER	PID = 0 ppm 15:10		WC5-1D/S-2 Sampled for TOC & CEC Analysis	4 4 2 2	20" Recovery
6	S-3	Loose, wet, lt. brown, m-f SAND, trace c. sand, trace micaceous sand Poorly Graded SANDS (SP) GLACIAL DEPOSITS **W.T.**	PID = 0 ppm 15:15			2 3 4 6	16" Recovery
8	S-4	Same as S3	PID = 0 ppm 15:20			3 7 8 8	24" Recovery
10	S-5	Same as S3	PID = 0 ppm 15:30			2 4 4 5	12" Recovery

HTW DRILLING LOG

HOLE No. **WC5-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 2 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
12							
14							
15							
16	S-6	Loose, wet, lt. brown, m-f SAND, trace micaceous sand (SP)	PID = 0 ppm 15:40		WC5-1D/S-6 for TOC and CEC Analysis	2 3 4 6	12" Recovery
17							
18							
20							
22	S-7	Same as S6	PID = 0 ppm 15:50			2 3 6 10	16" Recovery
24							
25							
26	S-8	Loose to med. dense, wet, lt. brown, m-f SAND (SW)	PID = 0 ppm 16:00			2 5	18" Recovery

HTW DRILLING LOG

HOLE No. **WC5-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 3 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
27	S-8					13 17	
28							
30							
32	S-9	Loose to med. dense, wet, brown to lt. brown, f-c SAND, some f. gravel Well Graded SANDS (SW)	PID = 0 ppm 16:15			3 3 12 27	8" Recovery
34							
35	S-10		N/A			3 6 6 8	No Recovery
36							
37							
38							
40	S-11	Loose, wet, lt. brown, m-f SAND Poorly graded SAND (SP)	PID = 0 ppm 4/14/99 9:05			3 5 6 8	17" Recovery
42							

HTW DRILLING LOG

HOLE No. **WC5-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 4 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45	S-12	Loose, wet, greenish-gray, f SAND, trace silt - Poorly Graded Sands (SP)	PID = 0 ppm 9:20			3 5 7 9	17" Recovery
46							
47							
48							
50	S-13	Loose, wet, greenish gray, f SAND, trace silt - Poorly graded SAND with silt (SP-SM)	PID = 0 ppm 9:35			3 3 4 7	13" Recovery
52							
54							
55	S-14	Loose, wet, olive-gray, m-f SAND, trace silt - Poorly Graded SANDS (SP)	PID = 0 ppm 9:50			3 3 5 7	20" Recovery
56							
57							
58							

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URSGWC Federal Services
Log prepared 7/25/02

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC5-1D**

HTW DRILLING LOG

HOLE No. **WC5-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 5 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
60							
	S-15	Loose, wet, olive-gray, m-f SAND, trace silt - Poorly Graded SANDS (SP)	PID = 0 ppm 10:00			3 4 7 7	12" Recovery
62							
64							
65							
	S-16	Loose, olive-gray, m-f SAND, trace silt Poorly Graded SANDS (SP)	PID = 0 ppm 10:10			3 3 5 8	22" Recovery
66							
67							
68							
70							
	S-17	Loose, wet, olive-gray, m-f SAND, some silt - Poorly Graded SAND (SP)	PID = 0 ppm 10:20			4 6 6 10	20" Recovery
72							
74							

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URSGWC Federal Services
Log prepared 7/25/02

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No. **WC5-1D**

HTW DRILLING LOG

HOLE No. **WC5-1D**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 6 OF 6 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
75							
	S-18	Loose, wet, greenish-gray, f SAND Poorly Graded SANDS (SP)	PID = 0 ppm 10:40			2 3 3 3	20" Recovery
76							
77							
78							
80							
	S-19	Loose, greenish-gray, f SAND, Poorly Graded SANDS (SP) GLACIAL DEPOSITS	PID = 0 ppm 10:50			3 9 4 6	18" Recovery
82							
84							
85		CORE RUN #1 Phyllite, gray, fine-grained, thickly-bedded,strong (throughout core) Legend N - naturally occuring fracture M - mechanical break/fracture (occurred during coring) Fo - Natural Fracture along Foliation Note All naturally occuring fractures ,except for one labelled Fo, are caused by faulting. Fo N N M M N N N N N N N END OF BORING		Core WC5-1D (Run #1) Penetration = 60 inches Recovery = 57 inches Strength = Strong Hardness= Mod. Hard Sum of lengths intact = 51" RQD = Sum of L intact / Pen. = 51/60 = 0.85 Recovery % = Recov./Pen = 57/60x100% = 95%		10 min 8 min 5 min 6 min 5 min	Spoon hit refusal at 85' 2" Penetration to 90' 2"
86							
88							
90							

BORING LOG

HOLE No. **WC5-1S**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 2 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Log
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4" ID, 5-foot augers	8. HOLE LOCATION: About 250' SW-W from N corner of building, B-2 (Area No. 5).
	9. SURFACE ELEVATION: + 4.89 feet
	10. DATE STARTED: 3/22/99 — 11. DATE COMPLETED: 3/22/99
12. OVERBURDEN THICKNESS: > 11.5 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 2 feet below ground surface
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 2.3 ft bgs
14. TOTAL DEPTH OF HOLE: 11.5 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A			N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Asphalt (3")					
		Med. dense, dk. gray, moist, gravelly, m-f SAND, Poorly Graded SAND (SP)	PID = 0 ppm 12:30			13	Little Recovery
		FILL LAYER				16	
						11	
2		**W.T.**				11	
2.5	S-2	Med. dense, wet, brown, m-f SAND - Poorly graded SAND (SP)	PID = 0 ppm 12:35			9	2" Recovery
		GLACIAL DEPOSITS				15	
						15	
4						17	
4.5	S-3	Med. dense, wet, brown, m-f SAND - Poorly graded SAND (SP)	PID = 0 ppm 12:40			9	10" Recovery
						11	
						13	
6						17	
6.5	S-4	Becoming coarser; tr. f. gravel to c. sand noted	PID = 0 ppm 13:05			6	Recovery information is Not Available
						10	
						10	
8						12	
8.5	S-5	Med. dense, wet, brown, c-f SAND - trace f. gravel - Poorly graded SAND (SP)	PID = 0 ppm 13:10			10	Recovery information is Not Available
		GLACIAL DEPOSITS				12	
						12	
10							

HTW DRILLING LOG

HOLE No. **WC5-1S**

PROJECT: Stratford Army Engine Plant Remedial Investigation

INSPECTOR: Ricardo Colón

SHEET 2 OF 2 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					15	
11.5		END OF BORING					
12							
14							
15							
16							
17							
18							
20							
22							
24							
25							
26							

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URSGWC Federal Services
Log prepared 7/25/02

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC5-1S

BORING LOG

HOLE No. **WC5-2I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 1 SHEET	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 truck-mounted rig
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4" ID, 5-foot augers	8. HOLE LOCATION: Near SE corner of B-2 (in northern section of Area No. 3).
	9. SURFACE ELEVATION: + 7.70 feet
	10. DATE STARTED: 4/16/99 — 11. DATE COMPLETED: 4/16/99
12. OVERBURDEN THICKNESS: > 40 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5 feet
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT: 5 ft bgs
14. TOTAL DEPTH OF HOLE: 40 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A			N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
50							Driller augered 55 ft. bgs. Split-spoons were not used while advancing the borehole. For a characterization of the soil, **please refer to WC5-1D.**
52							
54							
55		END OF BORING					
56							
58							

BORING LOG

HOLE No. **WC5-2S**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 2 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4" ID, 5-foot augers	8. HOLE LOCATION: SW section Area No. 5, 100' NE of the int. of Access Rd. & Main St.
	9. SURFACE ELEVATION: + 8.53 feet
	10. DATE STARTED: 3/23/99 — 11. DATE COMPLETED: 3/23/99
12. OVERBURDEN THICKNESS: > 12 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 5 feet below ground surface
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 5.9 ft bgs
14. TOTAL DEPTH OF HOLE: 12 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A			N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Soft, brown, low plastic, sandy CLAY -Sandy lean CLAY (CL) FILL LAYER	PID = 0 ppm 13:40			2 3 1 2	24" Recovery
2							
2.5	S-2		PID = 0 ppm 13:45			8 9 8 6	24" Recovery
4							
4.5	S-3	Loose, brown, m-f SAND - Poorly graded SAND (SP)	PID = 0 ppm 13:55			2 5 7 9	20" Recovery
W.T.							
6							
6.5	S-4	Becoming coarser; some f. gravel to c.	PID = 0 ppm 14:00			NA NA NA NA	24" Recovery NA - blow counts are not available
8							
8.5	S-5	Becoming coarser; some f. gravel to c. sand FILL LAYER	PID = 0 ppm			NA NA NA	24" Recovery NA - blow counts are not available
10							

HTW DRILLING LOG

HOLE No. **WC5-2S**

PROJECT	INSPECTOR	SHEET	2
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	OF	2 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					NA	
12		END OF BORING					

14 15 16 17 18 20 22 24 25 26

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Log prepared 7/25/02

PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC5-2S

BORING LOG

HOLE No. **WC5-3S**

1. COMPANY NAME	URSGWC Federal Services
2. DRILLING SUBCONTRACTOR	Connecticut Test Borings
SHEET / OF	1 / 1 SHEET
3. PROJECT	Stratford Army Engine Plant Remedial Investigation
4. LOCATION	Stratford, Connecticut
5. NAME OF DRILLER	Steve Butrej
6. MANUFACTURER'S DESIGNATION OF DRILL	CME 75 truck-mounted drill rig
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT	2" OD split spoon 4 1/4" ID, 5-foot augers
8. HOLE LOCATION	Near SE corner of B-2 (in northern section of Area No. 3).
9. SURFACE ELEVATION	+ 7.72 feet
10. DATE STARTED	4/15/99
11. DATE COMPLETED	4/16/99
12. OVERBURDEN THICKNESS	> 12 feet
13. DEPTH DRILLED INTO ROCK	0
14. TOTAL DEPTH OF HOLE	12 feet
15. DEPTH GROUNDWATER ENCOUNTERED	5.5 feet
16. DEPTH TO WATER 24 HRS. AFTER WELL DEVELOPMENT	5.2 ft bgs
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
N/A			N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
W.T.							Driller augered down directly to 12 ft. The split spoons were not used during the advancing of the hole. For a characterization of the soil, **please refer to WC5-1D.**
6							
8							
10							
12		END OF BORING					
14							

BORING LOG

HOLE No. **WC6-1I**

1. COMPANY NAME: URSGWC Federal Services	2. DRILLING SUBCONTRACTOR: Connecticut Test Borings
SHEET 1 OF 4 SHEETS	
3. PROJECT: Stratford Army Engine Plant Remedial Investigation	4. LOCATION: Stratford, Connecticut
5. NAME OF DRILLER: Steve Butrej	6. MANUFACTURER'S DESIGNATION OF DRILL: CME 75 Truck Mounted Drill Rig
7. SIZE AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2" OD split spoon; 4 1/4" ID, 5-foot augers	8. HOLE LOCATION: In South Parking Lot (Area No. 6), west of the treatment plant.
	9. SURFACE ELEVATION: + 6.09 feet
	10. DATE STARTED: 3/24/99 — 11. DATE COMPLETED: 3/25/99
12. OVERBURDEN THICKNESS: < 50 feet	15. DEPTH GROUNDWATER ENCOUNTERED: 4 feet bgs
13. DEPTH DRILLED INTO ROCK: 0	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 4.2 ft bgs
14. TOTAL DEPTH OF HOLE: 50 feet	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
	X		N/A

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	SEMI-VOCs	METALS	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
N/A					N/A

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. NAME OF INSPECTOR
		X		Ricardo Colón

DEPTH (FEET) a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
0.5	S-1	Asphalt (3")					
		Med. dense, moist, yellowish-orange, f SAND, trace c. SAND (SP)	PID = 0 ppm 8:50			13	20" Recovery
		FILL LAYER				9	
2						11	
						11	
2.5	S-2	Loose, wet, olive-gray, c-f SAND, some f. gravel - Well Graded SAND (SW)	PID = 0 ppm 8:55			10	12" Recovery
						7	
						8	
4		**W.T.**				7	
4.5	S-3	Loose, wet, olive-gray, c-f SAND, some f gravel - Well graded SAND (SW)	PID = 0 ppm 9:10			10	4" Recovery
						7	
						8	
6						7	
6.5	S-4	Loose, wet, olive-gray, m-c SAND, some f gravel - Poorly graded SAND (SP)	PID = 0 ppm 9:15			2	12" Recovery
						3	
						3	
8						5	
8.5	S-5	Loose, wet, greenish-gray, m-c SAND, some gravel - Poorly graded SAND (SP)	PID = 0 ppm 9:25			2	6" Recovery
						4	
10						5	

HTW DRILLING LOG

HOLE No. **WC6-1I**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	2	4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
10.5	S-5					5	
12							
14							
15	S-6	Loose, wet, grayish brown, c-f SAND, some f. gravel - Well graded SAND (SW)	PID = 0 ppm 9:45			2 5 6 6	8" Recovery
16							
17							
18							
20	S-7	Loose, wet, grayish brown, c-f SAND, some f. gravel - Well graded SAND (SW)	PID = 0 ppm 9:50			3 6 8 11	16" Recovery
22							
24							
25	S-8	Med. dense, moist, yellowish-brown, m-f SAND, some gravel- Poorly graded SAND (SP) FILL LAYER	PID = 0 ppm 9:55			6 14	22" Recovery
26							

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PROJECT
Stratford Army Engine Plant Remedial Investigation
Project No. R98104

HOLE No.
WC6-1I

HTW DRILLING LOG

HOLE No. **WC6-1I**

PROJECT	INSPECTOR	SHEET	OF
Stratford Army Engine Plant Remedial Investigation	Ricardo Colón	3	4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
	S-8					14 17	
27							
28							
30							
	S-9	Med. dense, moist, Varved layers of Brown f. SAND (6")(SP); Silty f. GRAVEL (8") (GP); and Red, clayey GRAVEL (8") (GP) GLACIAL DEPOSITS	PID = 0 ppm 10:05			13 19 27 24	22" Recovery
32							
34							
35							
	S-10	Loose, gravelly, reddish f. SAND, some clay - Clayey SAND with gravel (SC)	PID = 0 ppm 10:30			4 10	24" Recovery
36		Med dense, moist, olive-gray, m-f SAND, trace c. sand - Poorly graded SAND (SP)				22 22	
37							
38							
40							
	S-11	Med. dense, moist, olive-gray, m-f SAND, trace f. gravel to c. sand - Poorly Graded SAND (SP)	PID = 0 ppm			7 11 11 13	6" Recovery
42							

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HTW DRILLING LOG

HOLE No. **WC6-1I**

PROJECT: Stratford Army Engine Plant Remedial Investigation
INSPECTOR: Ricardo Colón
SHEET 4 OF 4 SHEETS

DEPTH a	SMPL. INT. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX No. e	ANALYTICAL SAMPLE No. f	BLOW COUNTS g	REMARKS h
44							
45							
46	S-12		PID = 0 ppm			7 4	No Recovery Piece of gravel found inside the spoon
47						7 7	
48							
50	S-13	GLACIAL DEPOSITS				3 5 6 8	No Recovery Spoon seems to be pushing gravel
52		END OF BORING					
54							
55							
56							
57							
58							

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